

PERSONAL INFORMATION

Melda Küçükdemirci



📍 FORTH- INSTUTITE FOR MEDITERRANEAN STUDIES (IMS), Laboratory of Geophysical - Satellite Remote Sensing & Archaeo-environment, Rethymno (Greece)
✉ meldakd@istanbul.edu.tr

Date of birth 13/02/1983 | **Nationality** Turkish

WORK EXPERIENCE

12/12/2017–Present

Post Doc

FORTH- INSTUTITE FOR MEDITERRANEAN STUDIES (IMS), Laboratory of Geophysical - Satellite Remote Sensing & Archaeo-environment

11/07/2014–01/06/2017

PhD Researcher

Istanbul University Geophysical Engineering Department
 Research and Teaching

02/01/2009–11/07/2014

Research Assistant

Istanbul University Geophysical Engineering Department, Istanbul (Turkey)

01/06/2010–01/06/2011

Researcher

CNR- Institute for Technologies Applied to Cultural Heritage (ITABC), Rome (Italy)

Research Interests

Archaeological prospection , Ground Penetrating Radar, Magnetometry, Statistical Analysis, Quantitative Data Integration approaches, Historical Buildings, Non-destructive techniques, Machine Learning, Deep Learning

EDUCATION AND TRAINING

17/09/2008–11/07/2014

Ph.D.

Istanbul University Geophysical Engineering Department

Supervisors : Prof.Dr.Salvatore Piro and Prof.Dr.Niyazi Baydemir

Thesis : The application of quantitative data integration approaches for archaeology

PERSONAL SKILLS

Mother tongue(s)

Turkish

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Italian	A1	A1	A1	A1	A1
German	A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Organisational / managerial skills

PROJECTS

- **TU 1208- COST European cooperation in Science and Technology- (Researcher)** Civil Engineering applications of Ground Penetrating Radar (2014-2017)
- **308417- 7th Frame European Union Research and Innovation Programme- (Researcher)-** Marsite new directions in seismic hazard assessment through focused earth observation in the Marmara Supersite (2012-2016)
- **700748-EU European Commision - (Researcher)-** Assessment and mitigation of liquefaction across Europe : a holistic approach to protect structures/infrastructures for improved resillince to earthquake-induced liquefaction disasters (2014-2015)
- **CNR-Italy Research Projects-(Researcher) -** Geophysical investigation of the N-E foot of Palatine Hill (Rome,Italy) (2010-2011)
- **CNR-Italy Research Projects- (Researcher)-** Integrated geophysical investigation to study the archaeological site of Aquinum. (2011)
- **Istanbul University Research Fund (Researcher) BAP-** Bosphorus Research Project - 2012-2016
- **Istanbul University Research Fund - PhD. Research Project-(Coordinator) -** The application of Magnetometry and Ground Penetrating Radar methods in archeological sites in Turkey (2012-2014)
- **Istanbul University Research Fund (Coordinator)- Master Thesis Project- The determination of graves pf Antandros by magnetic prospection (2007-2008)**
- **Istanbul University Research Fund- BAP-3581- (Researcher) -**The determination of Paleointensity of Quaternary Rocks in North Anatolia (2006).

Job-related skills

Geophysical Softwares

- GPR-SLICE (Ground Penetrating Radar Imaging Software)
- PF (Potential Field Geophysical Software)

Computer Programming

- Python

Geographic Information Systems

- ArcGIS
- QGIS

Others

- Surfer
- Corel Draw

Driving licence

B

ADDITIONAL INFORMATION

Publications

- **Küçükdemirci M., Özer E. , Baydemir N., Piro S., Zamuner D.2017**, An application of integration approaches for archaeo-geophysical data: Case study from Aizanoi", ARCHAEOLOGICAL PROSPECTION DOI: 10.1002./arp.1583.
- Lara Pajewski, Mercedes Solla, **Melda Küçükdemirci, 2017**, Ground Penetrating Radar For Archaeology And Cultural Heritage Diagnostics, Nondestructive Techniques for the assessment and Preservation of historic structures, pp:1-18,2017. CRC press, ISBN : 9781138710474
- Solla M., Perez Gracia V., Fontul S., Santez Assunção S., **Küçükdemirci M., 2017**,"Combination of GPR with other NDT techniques in different fields of application - COST Action TU1208", European Geophysical Union 2017 , Vienna.Austria.

- Piro S., Papale E., **Küçükdemirci M.**, Zamuner D.,**2017**, "Analysis and Interpretation of geophysical surveys in archaeological sites employing different integration approaches", European Geophysical Union, Vienna, Austria.
- **Küçükdemirci M.**, **2017**, Piro S., Papale E., "Principal Component Analysis for archeogeophysical data", European Geophysical Union , Vienna, Austria.
- **Küçükdemirci M.**, Yalçın A.B.,**2017**, "Ground Penetrating Radar Survey at Yoros Fortesss, Istanbul ", American Geophysical Union, San Fransisco,USA.
- **Küçükdemirci,M** .,Özer,E.,Piro,S.,Zamuner.D.,**2016**, Aizanoi 2013 kazı Sezonu Jeofizik çalışmalar ve Sonuçları, Aizanoi-II,Özer,E., Ed, Bilgin Kültür Sanat,Ankara.
- **Küçükdemirci M.**, Piro S., Zamuner D. , Özer E.,**2015**, Integrated Approaches On Archaeo-Geophysical Data", American Geophysical Union, San Fransisco, USA.
- **Küçükdemirci,M**.,Piro,S.,Ozer,E.,Baydemir,N.,Zamuner,D.,**2015**, An integrated geophysical survey at Aizanoi archaeological site(Turkey), Archaeologia Poland,Vol.53,pp:447-479.
- **Küçükdemirci,M**., Piro.S, Baydemir, N., Zamuner,D., Ozer.E., **2014**, The Application Of Mathematical And Statistical Integration Approach On Archaeological Prospection Data, Case Studies From Aizanoi. 43rd Computer Applications and Quantitative Methods in Archaeology, Siena, Italy, pp 80-81
- **Küçükdemirci, M.**, Baydemir, N., Özer, E, Atik, N., Yalçın, A.B,**2014**, 3 D ground penetrating radar applications on archeological sites: case studies from Turkey, 5.Yer Elektrik Çalıştayı, Edirne, Turkey.
- **Küçükdemirci M.**, Şengül A., **2014**, Yerbilimleri Ve Arkeoloji: Aizanoi'Da Yapılan Jeofizik Çalışmalar", Aizanoi -I, Özer,E., Ed., Bilgin Kültür Sanat, Ankara, ss.100-120.
- Piro S., Ceraudo G., Zamuner D., **Küçükdemirci M.2013**, Integrated Geophysical Investigations Of Ancient Aquinum Roman Town (Frosinone, Italy).", 4th EARSeL Workshop on Cultural and Natural Heritage, Italy.
- **Küçükdemirci M.**, **2013**, The Ground Penetrating Radar Survey On Heraion Teichos Acropolis(Tekirdag-Turkey)", 10 the International Conference on Archaeological Prospection, Vienna, Austria.
- Link R., Bilefelt R., Fassbinder J., Koch J., **Küçükdemirci M.**,**2013**, 3d GPR Prospection In Pompeopolis- A Metropolis In The Paphlagonia", 10 the International Conference on Archaeological Prospection, Vienna, Austria.
- Link R., Fassbinder J., Koch J., **Küçükdemirci M.**, **2012**, Monumentalbauten In Pompeiopolis Mit Bodenradar In Der Hauptstadt Der Ehemaligen Römischen Provinz Paphlagonien", DENKMALPFLEGE INFORMATIONEN, pp.67-69.
- Piro S., Zamuner D., Ceraudo G., **Küçükdemirci M.2011**, "Multimethodological Approach To Study The Ancient Aquinum Roman Town (Frosinone, Italy).", 9th International Conference on Archaeological Prospection, Turkey.
- Piro S., Zamuner D., **Küçükdemirci M.**,**2011**, Integration Of Ground Remote Sensing Methods For Archaeological Prospections", European Geosciences Union General Assembly 2011, Vienna, Vol. 13, no.7886
- Piro S., Zamuner D. , **Küçükdemirci M.**,**2011**, High-Resolution GPR Surveys For The Study And Characterisation Of The archaeological Site In Urban Area. The Case Of Palatino Hill (Rome, Italy)", European Geosciences Union General Assembly 2011, Austria, vol.Vol 13, no.7953
- **Küçükdemirci M.2009**, "A Case Study The Necropole Area Of Antandros Ancient City (Turkey) By Magnetic Prospection ", Mémoire du sol, espace des hommes- The 8th International Conference on Archaeological Prospection and the 7th colloque de GEOFCAN, Paris,France, vol.33
- **Küçükdemirci,M.2009**. The investigation of Graves of Antandros city (Turkey) by magnetic methods, AGU meeting.

Honours and awards

- The scientific and technological Research Council - International Doctoral Research Fellowship - Visit : CNR-ITALY (2010)
- Tincel Foundation (Turkey) Visit : CNR-Italy Reseracher - (2014)
- Stavros Niarchos Foundation – FORTH *Fellowships- ARCHERS (2017)*

Certifications

- COST Action TU1208 - Training School on Non-Destructive Testing techniques applied to civil engineering, Barcelona,2016

- COST Action TU1208 - Electromagnetic Modelling of GPR -Split, 2016
- EU-COST Action TU 1208 -Training School on Ground Penetrating Radar for the assessment of transport infrastructures.", Osijek,2017
- GPR Roadshow - GPR Application on Roads and Railways, Novi sad,2017
- Training School on GPR Methods For Archaeology : Ground Penetrating Radar Advances in Subsurface Imaging For Archaeology, Roma, 2010
- Training Education On "Geophysics For Archaeology: Surveying Methods, Elaboration And 2D And 3D Representation , Roma, 2009.
- GPR methods for Archeology and Historical Buildings- Rome-2010